(19) World Intellectual Property Organization International Bureau



T SOCIA BURBANI IN DONIA MAN ARMIT ABUR ABUR ABUR 18 DA BURB ABUR ABUR ABUR ABUR MA RAKATI MANA MAN

(43) International Publication Date 30 June 2005 (30.06.2005)

(10) International Publication Number WO 2005/059803 A3

(51) International Patent Classification⁷:

G06F 19/00

(21) International Application Number:

PCT/IB2004/052791

(22) International Filing Date:

13 December 2004 (13.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/529,786

16 December 2003 (16.12.2003) US

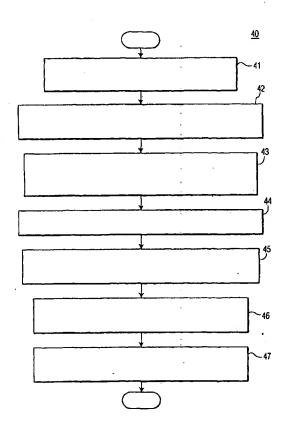
- (71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS, N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ALSAFADI, Yasser

H. [US/US]; P.O. Box 3001, Briarcliff Manor, New York 10510-8001 (US).

- (74) Common Representative: KONINKLIJKE PHILIPS ELECTRONICS, N.V.; c/o John F. Vodopia P.O. Box 3001, Briarcliff Manor, New York 10510-8001 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,

[Continued on next page]

(54) Title: CLINICAL DECISION SUPPORT SYSTEM FOR GUIDELINE SELECTION AND KNOWLEDGE/LOCATION INDICATION WITH THE GUIDELINE



(57) Abstract: A clinical decision support system (30) displays a patient treatment guideline (20) for a given patient in response to a query from a medical practitioner along with an indicator (21) as to what state in the patient treatment guideline (20) the current patient is. According to one aspect of the present invention, an exemplary embodiment of a method (40) for interacting with a medical record of a patient includes: entering a patient identification (43) into a user interface (33) along with a care provider identification; selecting a patient treatment guideline (45) based on the entered information; and displaying the patient treatment guideline (46) on the user interface (33) along with an indicator (21) identifying a current point in the patient treatment guideline (20). An exemplary embodiment of an apparatus (30) for interacting with a medical record of a patient includes storage (32), a user interface (33) and a processor (31). The storage (32) stores one or more patient treatment guidelines (20). The user interface (33) accepts a command from a user identifying a patient and context information and displays a selected patient treatment guideline (20) from among the one or more patient treatment guidelines (20). The processor (31) searches the storage (32) for the selected patient guideline (20) that matches the identified patient and the context information.

WO 2005/059803 A3

TRANSCRIPTURE II DRAINE FILIT BEITH BEITH BITH BEITH BEI

FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE,

BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

 as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for all designations

Published:

- with international search report
- (88) Date of publication of the international search report: 2 March 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

Interioral Application No PCT/IB2004/052791

A. CLASSI IPC 7	FICATION OF SUBJECT MATTER G06F19/00									
According to International Patent Classification (IPC) or to both national classification and IPC										
	SEARCHED									
Minimum do IPC 7	ocumentation searched (classification system followed by classification $G06F$	on symbols)								
Documental	lion searched other than minimum documentation to the extent that s	such documents are included in the fields sear	ched							
Electronic d	ata base consulted during the international search (name of data ba	se and, where practical, search terms used)								
EPO-In	ternal, INSPEC		•							
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT									
Category *	Citation of document, with indication, where appropriate, of the rela	evant passages	Relevant to claim No.							
X	BOXWALA A A ET AL: "Architecture multipurpose guideline execution PROCEEDINGS / AMIA ANNUAL SYM AMIA SYMPOSIUM. 1999, 1999, pages XP002342375 ISSN: 1531-605X page 703, left-hand column, line 704, left-hand column, last line	engine." MPOSIUM. 5 701-705,	1-20							
X Furth	ner documents are listed in the continuation of box C.	Patent family members are listed in a	nnex.							
"A" document defining the general state of the lart which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publishing date of pactors.		"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled								
'P' docume later th	in the art. *&* document member of the same patent fan	nily								
Date of the a	actual completion of the international search	Date of mailing of the international search	report							
20	6 August 2005	12/09/2005								
Name and n	nailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Sanandrés Ledesma,	J							

INTERNATIONAL SEARCH REPORT

Intermediation No PCT/IB2004/052791

ation) DOCUMENTS CONSIDERED TO BE RELEVANT	PC1/182004/052/91	
tegory * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim		
DONGWEN WANG ET AL: "GLEE - A model-driven execution system for computer-based implementation of clinical practice guidelines" AMIA 2002 SYMPOSIUM. BIO MEDICAL INFORMATICS: ONE DISCIPLINE. ANNUAL SYMPOSIUM OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION. PROCEEDINGS AMERICAN MEDICAL INFORMATICS ASSOC BETHESDA, MD, USA, 2002, pages 855-859, XP002342376 page 855, right-hand column, line 19 - page 858, right-hand column, last line	1-20	
RAM P ET AL: "Executing Clinical Practice Guidelines using the SAGE Execution Engine" STANFORD MEDICAL INFORMATICS REPORT NUMBER: SMI-2003-0971, 'Online! 28 November 2003 (2003-11-28), pages 1-6, XP002342377 Retrieved from the Internet: URL:http://web.archive.org/web/20031128065 025/www-smi.stanford.edu/pubs/SMI_Reports/SMI-2003-0971.pdf> 'retrieved on 2005-08-26! page 1 - page 5	1-20	
US 5 850 221 A (MACRAE ET AL) 15 December 1998 (1998-12-15) column 5, line 45 - column 6, line 41 column 7, line 43 - column 8, line 58 column 17, line 7 - column 20, line 57	1-20	
US 2003/227386 A1 (PULKKINEN OTTO ET AL) 11 December 2003 (2003-12-11) paragraph '0006! paragraph '0009! - paragraph '0010! paragraph '0015! paragraph '0033! - paragraph '0034! paragraph '0038! - paragraph '0039! paragraph '0043! - paragraph '0049! paragraph '0056! - paragraph '0058!	14,16	
	Citation of document, with indication, where appropriate, of the relevant passages DONGWEN WANG ET AL: "GLEE - A model-driven execution system for computer-based implementation of clinical practice guidelines" AMIA 2002 SYMPOSIUM. BIO MEDICAL INFORMATICS: ONE DISCIPLINE. ANNUAL SYMPOSIUM OF THE AMERICAN MEDICAL INFORMATICS ASSOCIATION. PROCEEDINGS AMERICAN MEDICAL INFORMATICS ASSOC BETHESDA, MD, USA, 2002, pages 855-859, XP002342376 page 855, right-hand column, line 19 - page 858, right-hand column, last line RAM P ET AL: "Executing Clinical Practice Guidelines using the SAGE Execution Engine" STANFORD MEDICAL INFORMATICS REPORT NUMBER: SMI-2003-0971, 'Online! 28 November 2003 (2003-11-28), pages 1-6, XP002342377 Retrieved from the Internet: URL:http://web.archive.org/web/20031128065 025/www-smi.stanford.edu/pubs/SMI_Reports/ SMI-2003-0971.pdf> 'retrieved on 2005-08-26! page 1 - page 5 US 5 850 221 A (MACRAE ET AL) 15 December 1998 (1998-12-15) column 5, line 45 - column 6, line 41 column 7, line 43 - column 8, line 58 column 17, line 7 - column 20, line 57 US 2003/227386 A1 (PULKKINEN OTTO ET AL) 11 December 2003 (2003-12-11) paragraph '0006! paragraph '0009! - paragraph '0010! paragraph '0033! - paragraph '0034! paragraph '0033! - paragraph '0039! paragraph '0043! - paragraph '0049!	

INTERNATIONAL SEARCH REPORT

Improvement on patent family members

Interional Application No PCT/IB2004/052791

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 5850221	A	15-12-1998	WO US US	9715019 6037940 6426759 5886693	A B1	24-04-1997 14-03-2000 30-07-2002 23-03-1999
US 2003227386	A1	11-12-2003	AU WO EP	2003245888 03105095 1523724	A2	22-12-2003 18-12-2003 20-04-2005

Form PCT/ISA/210 (patent family annex) (January 2004)